



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,863	03/12/2007	Luis Ramos Robles	P18230-US1	1476
27045	7590	01/14/2009	EXAMINER	
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024				VAUGHAN, MICHAEL R
ART UNIT		PAPER NUMBER		
2431				
			MAIL DATE	DELIVERY MODE
			01/14/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/596,863	RAMOS ROBLES ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	MICHAEL R. VAUGHAN	2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 01 December 2008.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 30-32 and 46-49 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 30-32 and 46-49 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 27 June 2006 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.                                                           | 6) <input type="checkbox"/> Other: _____ .                        |

## **DETAILED ACTION**

The instant application having Application No. 10/596,863 is presented for examination by the examiner. Examiner acknowledges Applicant election of claims 30-32 and 46-49.

### ***Specification***

The disclosure is objected to because of the following informalities: there is a cited reference which has not be included on an IDS statement. On page 5, the Bruce Schneier book is incorporated by reference; therefore it needs to be included on an IDS statement.

Appropriate correction is required.

### ***Claim Objections***

Claims 30-32 and 46-49 are objected to because of the following informalities: The references in parenthesis raise the argument of whether they are specifically related to the figures' references or simply an example of the word preceding the parenthesis. For example in claim 30, it could be argued that the WLAN is the access network or WLAN is an example of an access network. The scope of the claims is mired by this relationship. It is not possible to determine the scope of the preceding

term because one could say it is just a variable name and another could argue that it must be that specific type of network for example. The removal of the parenthesis term would resolve the confusion or if it is intended to limit the scope to that type of entity, the generic word could be replaced by the parenthesis term.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 31, 32, and 46-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 31 and 32, it is unclear from the language of the claims what "the access level" is referring to. There is no mention of any access level in the parent claim to provide antecedent basis for this limitation. As such Examiner is interpreting the claim broadly not to impose any limiting scope of this term since its meaning cannot be ascertained within the confines of claim. Appropriate correction is required.

As per claim 46, there seems to be some word which does not fit into the meaning of the claim language. In the last limitation, "a means for confirming...towards an entity" renders the claim indefinite. It is not understood how one confirms something towards something else.

As per claim 47 and 48, it is not understood how “an entity” is related to two possible entities "SAAN, SSO\_SM". This raises the question mentioned above in the claim objection paragraphs. Is the entity a SAAN, or is it a SSO\_SM? Examiner fails to resolve how a singular entity could be both, so again it is impossible to ascertain the scope of entity as it relates to the plurality of parenthesis terms.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 30-32, 46, 48, and 49 are rejected under 35 U.S.C. 102(e) as being anticipated by USP Application Publication 2004/0225878 to Costa-Requena et al., hereinafter Costa.

As per claim 30, Costa teaches an apparatus arranged for receiving an access request in a telecommunication core network from an entity in an access network where a user with a user's equipment accesses through, the user being a subscriber of the

telecommunication CN and being identified by a user's identifier included in the access request, the apparatus having a means for carrying out an authentication procedure with the UE through the access network in order to authenticate the user (0034); and a means for computing at least one secret user's key (calculations are inherently performed on the Ki secret key employed by the GSM standard; 0029, 0052) usable as cryptographic material (0035), the apparatus comprising:

a means for deriving from the cryptographic material a user's shared key (confidential keys; 0035) intended for SSO purposes (0050); and  
a means for sending the user's shared key along with the user's identifier towards a session manager serving a service network (0050).

As per claim 31, Costa teaches comprising means for being notified that a session [session layer] the access level has been established, this notification triggering the sending of the user's shared key towards the session manager serving the service network (0036 and 0045).

As per claim 32, Costa teaches means for being notified that a session at the access level has been terminated, and means for forwarding this notification towards the session manager (0050) serving the service network in order to Inactivate a current master session for the user [single log-out].

As per claim 46, Costa teaches A user's equipment usable by a user with a subscription in a telecommunication network, and arranged to access a telecommunication service network through an access network , the user's equipment having means for carrying out an authentication procedure to authenticate the user with

a core network (GSM; 0029), where the user holds the subscription, through the access network and means for computing at least one secret user's key (calculations are inherently performed on the Ki secret key employed by the GSM standard; 0029, 0052) usable as cryptographic material, the user's equipment comprising:

- a means for deriving from the cryptographic material a user's shared key intended for SSO purposes (0035 and 0050);
- a repository for storing the user's shared key (0035; SIM); and
- a means for confirming the user's shared key stored at the user's equipment towards an entity in the service network (0048).

As per claim 48, Costa teaches a means for confirming includes a means for processing the user's shared key to obtain a key code [integrity check] to be transmitted to an entity in the service network (0048).

As per claim 49, Costa teaches means for receiving an SSO cookie [security token] from an entity in the service network, the SSO cookie to be included in all further service requests from the user's equipment as an SSO token (0034).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Costa in view of publication "Using GSM/UMTS for Single Sign-On" by Pashalidis and Mitchell hereinafter Mitchell.

As per claim 47, Costa is silent in disclosing means for confirming includes a means for downloading an SSO plug-in from an entity in the service network, the SSO plug-in running for confirming back the user's shared key. Mitchell's system of a single sign-on mechanism through a SIM based phone teaches that the protocol can be implement in a continuously running process (AKA 'service' or 'daemon') to minimized the user's interaction (see page 141, last paragraph before section 4). The service running in the background would keep the user authenticated if the system requires him/her to ever re-authenticate. It would also allow the system to know that the user was still active in the network therefore not time-out the user. It would be beneficial to Costa system to implement this feature because it would lessen the burden and interaction required by the user to stay authenticated in the network. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine this feature of Mitchell within the system of Costa to minimize the burden of the

Art Unit: 2431

user to stay connected in the network.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is listed on the enclosed PTO-892 form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL R. VAUGHAN whose telephone number is (571)270-7316. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2431

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. R. V./

Examiner, Art Unit 2431

/Syed Zia/

Primary Examiner, Art Unit 2431